

CLAIMS

1. A CDMA receiving apparatus comprising:

despreading means for providing despread processing to a plurality of received signals multiplexed to separate said signals;

first Viterbi decoding means for providing Viterbi decoding to a first signal having a minimum frame length of said despread signals;

first error checking means for providing an error checking to said first signal subjected to Viterbi decoding;

weighting factor calculating means for setting a weighting factor based on whether or not an error is detected; and

one or a plurality of second Viterbi decoding means for providing Viterbi decoding to a second signal other than said first signal using a value obtained by multiplying a path metric by said weighting factor.

2. The CDMA receiving apparatus according to claim 1, wherein said weighting factor calculating means sets a weighting factor having a large value to a time zone where no error is detected, and a weighting factor having a small value to a time zone where an error is detected.

3. The CDMA receiving apparatus according to claim 1, wherein when no error was detected by said first error checking means, said weighting factor

calculating means sets a weighting factor having a large value as a value of a state metric calculated by said first Viterbi decoding means decreases.

4. The CDMA receiving apparatus according to claim 5 1, further comprising one or a plurality of second error checking means for providing an error checking to said second signal subjected to Viterbi decoding, wherein said second error checking means provides Viterbi decoding to said second signal without 10 considering the weighting factor, and provides Viterbi decoding to said second signal again using the value obtained by multiplying the path metric by said weighting factor only when an error is detected by said second error checking means.

15 5. The CDMA receiving apparatus according to claim 1, further comprising convolutional coding means for providing convolutional code processing to said first signal subjected to Viterbi decoding by said first Viterbi decoding means, wherein when no error 20 is detected by said first error checking means, said weighting factor calculating means compares said first signal prior to Viterbi decoding with an output signal of said convolutional coding means on a symbol-by-symbol basis in connection with said 25 metric and sets a large weighting factor as a difference therebetween in the metric decreases.

6. A base station apparatus having a CDMA receiving apparatus, said CDMA receiving apparatus

comprising:

despreading means for providing despread processing to a plurality of received signals multiplexed to separate said signals;

- 5 first Viterbi decoding means for providing Viterbi decoding to a first signal having a minimum frame length of said despread signals;

- first error checking means for providing an error checking to said first signal subjected to Viterbi
10 decoding;

weighting factor calculating means for setting a weighting factor based on whether or not an error is detected; and

- one or a plurality of second Viterbi decoding
15 means for providing Viterbi decoding to a second signal other than said first signal using a value obtained by multiplying a path metric by said weighting factor.

7. A communication terminal apparatus having a CDMA
20 receiving apparatus, said CDMA receiving apparatus comprising:

despreading means for providing despread processing to a plurality of received signals multiplexed to separate said signals;

- 25 first Viterbi decoding means for providing Viterbi decoding to a first signal having a minimum frame length of said despread signals;

first error checking means for providing an error

checking to said first signal subjected to Viterbi decoding;

weighting factor calculating means for setting a weighting factor based on whether or not an error
5 is detected; and

one or a plurality of second Viterbi decoding means for providing Viterbi decoding to a second signal other than said first signal using a value obtained by multiplying a path metric by said
10 weighting factor.

8. An error correcting method comprising the steps of:

providing despread processing to a plurality of received signals multiplexed to separate said
15 signals;

providing Viterbi decoding to a first signal having a minimum frame length of said despread signals;

setting a weighting factor having a large value
20 to a time zone where no error is detected and a weighting factor having a small value to a time zone where an error is detected; and

providing Viterbi decoding to a second signal other than said first signal using a value obtained
25 by multiplying a path metric by said weighting factor.